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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,436

08/29/2005

Peter Hubertus Lamers

94018

2554

7590

02/01/2011

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120 South Riverside Plaza  
22nd Floor  
Chicago, IL 60606-3913

EXAMINER

CHANG, VICTOR S

ART UNIT

PAPER NUMBER

1788

MAIL DATE

DELIVERY MODE

02/01/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,436	<b>Applicant(s)</b> LAMERS ET AL.	
	<b>Examiner</b> VICTOR S. CHANG	<b>Art Unit</b> 1788	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 2-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Introduction**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' amendments and remarks filed on 1/10/2011 have been entered. Claim 1 has been amended. Claims 1, 26 and 27 are active.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. In response to the new matter in amended claim 1, the previous grounds of rejection have been reinstated and updated. Rejections not maintained are withdrawn.

### **Rejections Based on Prior Art**

4. Claims 1, 26 and 27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cox et al. (EP 1 010 793).

Cox's invention relates to a core material suitable for use in closed mould systems. The core material is based on at least one fibrous web containing a foam-structure (members) within the web (abstract). The foam structure can be prepared from expandable microspheres (members) which are introduced into the web using an optionally foamed binder material. See [0015]. The core material has a bending stiffness which allows easy bending around corners

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(drapable). See [0017]. In a preferred (interpreted as meaning non-limiting) embodiment, the fibrous web has a free volume of less than 60 v%. (See specification page 11, line 2.) The free volume means the volume that can be accessed by resin. (See specification page 13, line 22.) The remainder of the volume is a closed cell foam structure contained in the fibrous web. See [0015]. The expanded microspheres (members) have a diameter of 10-100  $\mu\text{m}$ . After expansion, the amount of expanded microspheres in the web is in general 10 to 60 v%. See [0028]. The core material has open channels and permeable to resin. See [0014]. In one embodiment, accessibility for the resin (resin flow properties) are provided by disposing the microspheres mainly within the fibrous web, and are arranged to form a pattern of 'islands', which are separated from each other by areas (channels) containing no microspheres, but only fibers (microspheres are distributed irregularly). Preferably, the microspheres are arranged in a regular pattern. See [0030].

For claims 1, 26 and 27, Cox is silent about the average diameter of the channels. However, since Cox teaches generally the same structure and composition, made by the same method, and for the same end use (core material for use in closed mould systems) as the claimed invention, workable average diameter of the channels is deemed to be either anticipated, or obviously provided by practicing the invention of prior art, dictated by the same end use requirements. Regarding newly amended limitation in claim 1, lines 3-5:

...core material is based on at least one fibrous web containing a foam-structure within or upon the web, said ~~foam structure~~web having a free volume of more than 60% and being formed of a plurality of members...

Since Cox teaches that, after expansion, the amount of expanded microspheres in the web is in general 10 to 60 v%. The balance of the volume (free volume) which is not occupied by the

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expanded microspheres (foam structure), and can be accessed by resin, is clearly in the range of 40 to 90 v%. Cox anticipates the amount of free volume as claimed.

### **Response to Arguments**

5. Applicants' argument in Remarks page 6 regarding the amended free volume limitation has been carefully reconsidered, but unpersuasive as set forth above.

### **Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTOR S. CHANG whose telephone number is (571)272-1474. The examiner can normally be reached on 6:00 am - 4:00 pm, Tuesday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Victor S Chang/

Primary Examiner, Art Unit 1788